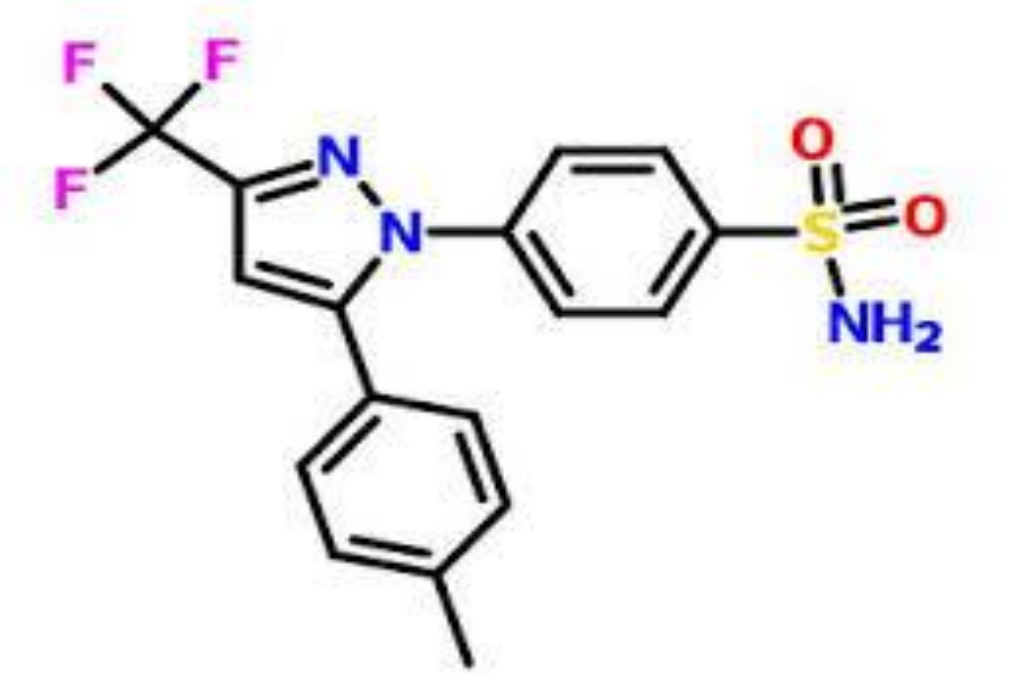
Celecoxib

CELEBREX

2)Structure of celecoxib.



3)dosage form of celecoxib.

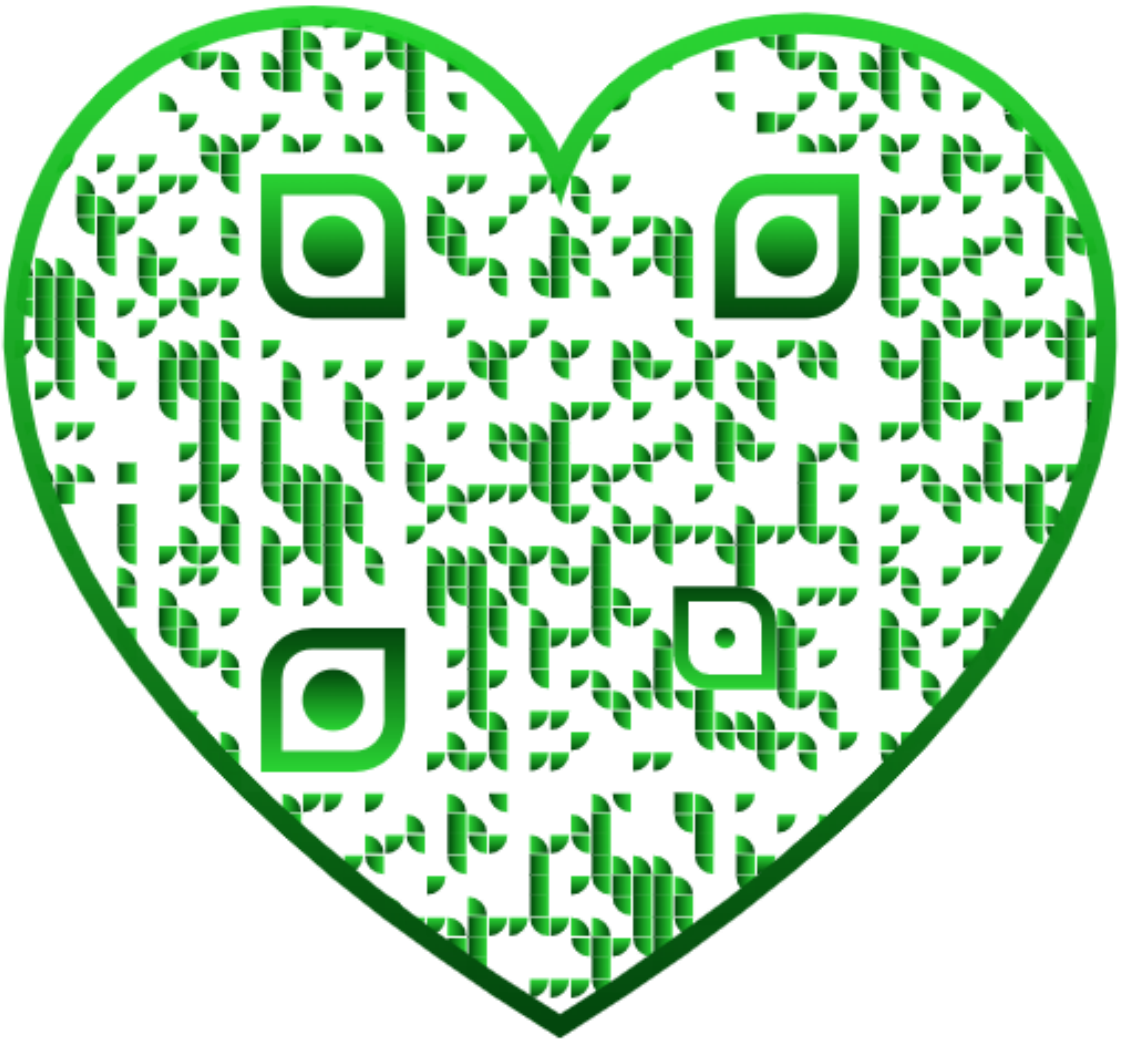
CELEBREX oral capsules contain either 50 mg, 100 mg, 200 mg or 400 mg of celecoxib.

4 the main use of celecoxib.

to treat osteoarthritis , arthritis acute pain and swelling

5) Mechanism of Action:

CELEBREX is a non-steroidal anti-inflammatory drug that exhibits anti-inflammatory, analgesic, and antipyretic activities in animal models. The mechanism of action of CELEBREX is believed to be due to inhibition of prostaglandin synthesis, primarily via inhibition of cyclooxygenase-2 (COX-2)



-Absorption

passive more Hydrophobic.

Peak plasma levels of celecoxib occur approximately 3 hrs after an oral dose.

Food Effects

When CELEBREX capsules were taken with a high fat meal, peak plasma levels were delayed for about 1 to 2 hours with an increase in total absorption (AUC) of 10% to 20%.Under fasting conditions, at doses above 200 mg, there is less than a proportional increase in Cmax and AUC, which is thought to be due to the low solubility of the drug in aqueous media. Coadministration of CELEBREX with an aluminum and magnesium containing antacid resulted in a reduction in plasma celecoxib concentrations with a decrease of 37% in Cmax and 10% in AUC.

6) Distribution

In healthy subjects, celecoxib is highly protein bound (~97%) within the clinical dose range. In vitro studies indicate that celecoxib binds primarily to albumin and, to a lesser extent, α1-acid glycoprotein. The apparent volume of distribution at steady state is approximately 400 L, suggesting extensive distribution into the tissues. Celecoxib is not preferentially bound to red blood cells.

7) Metabolism

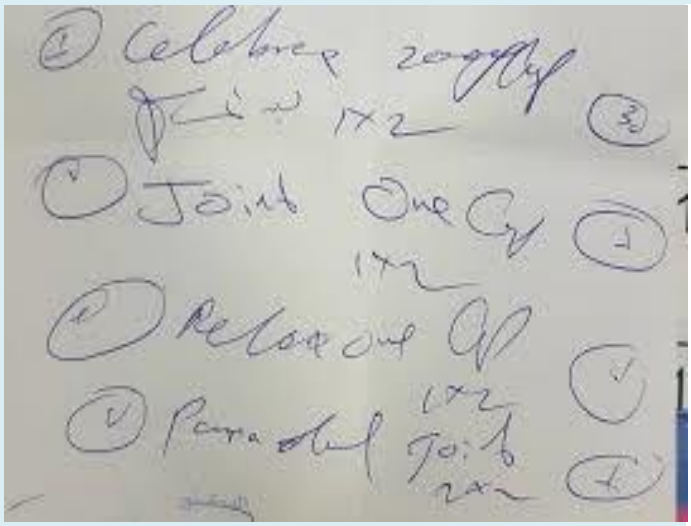
Celecoxib metabolism is primarily mediated via cytochrome P450 2C9. The enzyme that inhibits CYP2C9.

These metabolites are inactive as COX-1 or COX-2 inhibitors.

8) EXCRETION

About 57% of an oral dose of celecoxib is excreted in the feces AND 27% is found to be excreted into the urine in the form of metabolites.

8) commercial form prescription



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